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RAW SEQUENCE LISTING PATENT APPLICATION: US/10/088,356 DATE: 08/20/2002 (6.6)

TIME: 09:08:58

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Output Set: N:\CRF4\08202002\J088356.raw

- 3 <110> APPLICANT: TRUCKSIS, Michele
- 5 <120> TITLE OF INVENTION: VIRULENCE GENES OF M. MARINUM AND M. TUBERCULOSIS
- 7 <130> FILE REFERENCE: VET 1 WO
- C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/088,356
- C--> 10 <141> CURRENT FILING DATE: 2002-07-22
 - 12 <160> NUMBER OF SEQ ID NOS: 46
 - 14 <170> SOFTWARE: PatentIn Ver. 2.1
 - 16 <210> SEQ ID NO: 1
 - 17 <211> LENGTH: 18
 - 18 <212> TYPE: DNA
 - 19 <213> ORGANISM: Artificial Sequence
 - 21 <220> FEATURE:
 - 22 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
 - 24 <400> SEQUENCE: 1
 - 25 ctaggtacct acaacctc
 - 28 <210> SEQ ID NO: 2
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 - 30 <212> TYPE: DNA
 - 31 <213> ORGANISM: Artificial Sequence
 - 33 <220> FEATURE:
 - 34 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
 - 36 <400> SEQUENCE: 2
 - 37 catggtaccc attctaac 40 <210> SEQ ID NO: 3

 - 41 <211> LENGTH: 89
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 - 45 <220> FEATURE:
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 - 57 <210> SEQ ID NO: 4
 - 58 <211> LENGTH: 169
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 - 62 <220> FEATURE:
 - 63 <223> OTHER INFORMATION: Mutant 41.2
 - 65 <220> FEATURE:
 - 66 <223> OTHER INFORMATION: "n" represents a, t, c, g, other or unknown

RAW SEQUENCE LISTING DATE: 08/20/2002 PATENT APPLICATION: US/10/088,356 TIME: 09:08:58

Input Set : A:\EP.txt

Output Set: N:\CRF4\08202002\J088356.raw

- 68 <400> SEQUENCE: 4 W--> 69 cgggccgatc tatgacgagn acgacgggac agatgggtcc ccggatggtc tacaccgaga 60 70 ccaaactgaa ctcgtcgttc tccttcggcg ggcccaagtg tctggtgaag gtgatccaaa 120 71 aactgtccgg gttgagcatc aaccggttca tcgccatcga cttcgtcgg 74 <210> SEQ ID NO: 5 75 <211> LENGTH: 55 76 <212> TYPE: PRT 77 <213> ORGANISM: Mycobacterium marinum 79 <220> FEATURE: 80 <223> OTHER INFORMATION: Mutant 41.2 82 <220> FEATURE: 83 <223> OTHER INFORMATION: "Xaa" represents any, other or unknown amino acid 85 <400> SEQUENCE: 5 W--> 86 Gly Arg Ser Met Thr Xaa Thr Thr Gly Gln Met Gly Pro Arg Met Val 89 Tyr Thr Glu Thr Lys Leu Asn Ser Ser Phe Ser Phe Gly Gly Pro Lys 90 20 2.5 92 Cys Leu Val Lys Val Ile Gln Lys Leu Ser Gly Leu Ser Ile Asn Arg 40 95 Phe Ile Ala Ile Asp Phe Val 50 96 99 <210> SEQ ID NO: 6 100 <211> LENGTH: 382 101 <212> TYPE: DNA 102 <213> ORGANISM: Mycobacterium marinum 104 <220> FEATURE: 105 <223> OTHER INFORMATION: Mutant 80.1 107 <220> FEATURE: 108 <223> OTHER INFORMATION: "n" represents a, t, c, g, other or unknown 110 <400> SEQUENCE: 6 W--> 111 acctcctgaa tgtgtgacat ggccctagaa ccctgcntta gactatttac atacatggct 60 112 tcacccggcc gcctgtgcca ctcataagac tactggaatg gaccaacaat cgcacagtca 120 113 tctgaagcag gagtctgtta atcacaggcc ctgaaggaac agtgactgtg cagagaaaga 180 114 cggcaatgca tcctgttaac taagtggctg gaggagtgcc aggtcattcc aaagaacatc 240 W--> 115 cctgaaatct ggaggagaag gtatagtgag caccccaaaa tttcaactgg agacatcana 300 116 ccagagtete tactgagetg ccaagettge ggeegeacte gagtaactag ttaacceett 360 382 117 ggggcctcta aacgggtctt ga 120 <210> SEQ ID NO: 7 121 <211> LENGTH: 121 122 <212> TYPE: PRT 123 <213> ORGANISM: Mycobacterium marinum
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 129 <223> OTHER INFORMATION: "Xaa" represents any, other or unknown amino acid

 131 <400> SEQUENCE: 7

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 134 1 5 10 15

 136 Thr Trp Leu His Pro Ala Ala Cys Ala Thr His Lys Thr Thr Gly Met

125 <220> FEATURE:

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DATE: 08/20/2002 RAW SEQUENCE LISTING TIME: 09:08:58 PATENT APPLICATION: US/10/088,356

Input Set : A:\EP.txt

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	137	3-m Clm	C1 m	20	rri o	Co.=	1116-	T 011		~1 n	C1	cor	37 - 1		uic	7 ~~	
		Asp Gln	35	ser	птр	ser	птъ	40	пåг	GIII	GIU	361	45	ASII	nis	AIG	
	140	Pro Arg		Sar	A cn	Ctrc	אן א		Lvc	λcn	Glw	λen		Sar	Cve	Leu	
	142	50 FIG AIG	ASII	261	мар	Cys	55	GIU	пуs	кар	GIY	60	нта	561	Cys	шец	
		Ser Gly	m~n	λνα	Car	λla		Cor	Dhe	Gln	λrα		Sar	T.e.u	Luc	Sor	
		65	пр	AIG	261	70	Arg	261	FIIC	GIII	75	1111	Ser	пеп	цуз	80	
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	149	GIA GIA	GIU	GIY	85	vai	261	TIIT	PIO	90 27L	FIIC	GIII	цец	GIU	95	361	
Tut N		Xaa Gln	Com	T 011		71-	71-	T ** 0	Tou		712	ת 1 ת	LOU	C1.,		Val	
W>	152	Add GIII	ser	100	TÄT	нта	мта	тÃг	105	міа	ALA	ита	Leu	110	Leu	Val	
		Asn Pro	Len		Dro	Len	λen	Gl v						110			
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		gctcacti					_	-			_						
		agccagt	-		_	_										acggg	172
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		/211/ DI	TIGIT.	1.).	,												
	17/	∠212\ ms	DE.	יייסם													
		<212> TY			Mycc	hact	teri	ım ma	rini	ım							
	175	<213> OI	RGANI	SM:	Мусс	bact	teri	ım ma	arinu	ım							
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	175 177 178 180 181 182 184 185 187 198 199 199 199	<213> OI <220> FI <223> OT <400> SI Ala Asn 1 Leu Thr Trp Ala Gly Leu 50 <210> SI <211> LI <212> TY <213> OI <2	RGANI EATUR THER EQUEN Arg Gly Gln 35 Leu EQ IC ENGTH YPE: RGANI EATUR	SM: RE: INFO ICE: Leu Ser 20 His Ala O NO: DNA: SM: RE:	ORMATO 9 Ser 5 Leu Val Gly: 10	Tyr Ala Arg Gly	Arg Thr Glu Glu 55	Pro Val Pro 40	His Glu 25 Val	Ser 10 Gln Arg	Leu	Thr	Ser Asp	Pro 30	15 Arg	Tyr	
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	175 177 178 180 181 182 184 185 187 188 190 191 194 195 196 197 199 200 202	<213> OI <220> FI <223> OI <220> SI Ala Asn 1 Leu Thr Trp Ala Gly Leu 50 <210> SI <221> LI <221> TI <221> TI <223> OI <220> FI <223> OI <400> SI	GANIEATUR THER EQUEN Arg Gly Gln 35 Leu EQ IC ENGTH YPE: RGANIEATUR THER EQUEN	SM: RE: INFO ICE: Leu Ser 20 His Ala NO: I: 22 DNA ISM: RE: INFO ICE:	PRMATE SET SET SET SET SET SET SET SET SET S	Tyr Ala Arg Gly Obact	E Muth	Pro Val Pro 40	His Glu 25 Val	Ser 10 Gln Arg	Leu	Thr	Ser Asp 45	Pro 30 Gly	15 Arg Val	Tyr Thr	60
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	175 177 178 180 181 182 184 185 187 188 190 191 194 195 199 200 202 203 204	<213> OI <220> FI <223> OI <220> SI Ala Asn 1 Leu Thr Trp Ala Gly Leu 50 <210> SI <221> LI <221> TI <221> TI <223> OI <220> FI <223> OI <400> SI	GANIEATURE COURT AT THE REQUENT AT THE REQUENT COURT C	SM: RE: INFO ICE: Leu Ser 20 His Ala NO: I: 22 DNA ISM: RE: INFO ICE: RECE:	PRMATE SET SET SET SET SET SET SET SET SET S	Tyr Ala Arg Gly Dbact	E Mutary Thr Glu Glu 55 teriv	Pro Val Pro 40	His Glu 25 Val arinu 62.2	Ser 10 Gln Arg	Leu Phe	Thr His	Ser Asp 45	Pro 30 Gly	15 Arg Val	Tyr Thr ccgccg	120
	175 177 178 180 181 182 184 185 187 198 199 200 202 203 204 205	<213> OI <220> FI <223> OI <220> FI <223> OI <400> SI Ala Asn 1 Leu Thr Trp Ala Gly Leu 50 <210> SI <211> LI <212> TI <212> TI <223> OI <400> SI gatccggi gcttgtgg	GANIEATURE COURT STATE COURT S	SM: RE: INFO ICE: Leu Ser 20 His Ala NO: I: 22 DNA ISM: RE: INFO ICE: Egect Ettge	PRMATE SET SET SET SET SET SET SET SET SET S	Tyr Ala Arg Gly Dbact	Thr Glu Glu 55 teriv	Pro Val Pro 40	His Glu 25 Val 62.2 a cca g tcg	Ser 10 Gln Arg	Leu Phe	Thr His	Ser Asp 45	Pro 30 Gly	15 Arg Val	Tyr Thr ccgccg	120

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Input Set : A:\EP.txt

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219 <222> LOCATION: (1)..(225)
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223 Gly Thr Gly Gly Ala Gly Gly Thr Gly Gly Thr Gly Gly Ala Ala Gly
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226 acc ggc acc ggc ggc atc caa ggc gcc ggc ggc cag ggc ggc acc ggc
                                                                   96
227 Thr Gly Thr Gly Gly Ile Gln Gly Ala Gly Gly Gln Gly Thr Gly
                20
                                   25
230 gga acc gga ggc caa ggc ggc acc gga ggc acc ggc acc gac agc acc
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231 Gly Thr Gly Gly Gln Gly Gly Thr Gly Gly Thr Gly Thr Asp Ser Thr
235 Asp Pro Ser Gln Ala Ala Gln Ala Gly Gly Gln Gly Val Gly Gly
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238 act ggt ggc gcg gcc ggt caa ggc ggc acc gga
239 Thr Gly Gly Ala Ala Gly Gln Gly Gly Thr Gly
240 65
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243 <210> SEQ ID NO: 12
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258 Gly Thr Gly Gly Gln Gly Gly Thr Gly Gly Thr Gly Thr Asp Ser Thr
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261 Asp Pro Ser Gln Ala Ala Gln Ala Gly Gly Gln Gly Val Gly Gly
265 Thr Gly Gly Ala Ala Gly Gln Gly Gly Thr Gly
266 65
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272 <213> ORGANISM: Mycobacterium marinum
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RAW SEQUENCE LISTING PATENT APPLICATION: US/10/088,356

DATE: 08/20/2002 TIME: 09:08:58

Input Set : A:\EP.txt

Output Set: N:\CRF4\08202002\J088356.raw

278 ggtcgaagac tatcggtatg ctccatagcg ttccgtcggg aagctgcatg ttgtcaaggg 60 279 tttcgtcgac ctctcggcga cccatgaatc ccgatagtgg cgtgaagaaa ccgtacgaga 120 280 tgctgatcac ctcgtgggcg gtcgccttcg atatcgggat gcgcaccaat ccctcaatcc 180 281 ggccggccac gttttccctt tccaccctgt cgacgagtgg gtgtccgtta tggcctaaat 240 282 aatccatctt gctgcctctt tctgaaatcg aatttattac tatcg 285 <210> SEQ ID NO: 14 286 <211> LENGTH: 93 287 <212> TYPE: PRT 288 <213> ORGANISM: Mycobacterium marinum 290 <220> FEATURE: 291 <223> OTHER INFORMATION: Mutant 67.1 293 <400> SEQUENCE: 14 294 Ser Lys Thr Ile Gly Met Leu His Ser Val Pro Ser Gly Ser Cys Met 295 10 297 Leu Ser Arg Val Ser Ser Thr Ser Arg Arg Pro Met Asn Pro Asp Ser 20 300 Gly Val Lys Lys Pro Tyr Glu Met Leu Ile Thr Ser Trp Ala Val Ala 35 40 45 303 Phe Asp Ile Gly Met Arg Thr Asn Pro Ser Ile Arg Pro Ala Thr Phe 55 306 Ser Leu Ser Thr Leu Ser Thr Ser Gly Cys Pro Leu Trp Pro Lys Ser 307 70 309 Ile Leu Leu Pro Leu Ser Glu Ile Glu Phe Ile Thr Ile 310 85 312 <210> SEQ ID NO: 15 313 <211> LENGTH: 90 314 <212> TYPE: PRT 315 <213> ORGANISM: Mycobacterium marinum 317 <220> FEATURE: 318 <223> OTHER INFORMATION: Mutant 67.1 320 <400> SEQUENCE: 15 321 Val Glu Asp Tyr Arg Tyr Ala Pro Arg Ser Val Gly Lys Leu His Val 10 324 Val Lys Gly Phe Val Asp Leu Ser Ala Thr His Glu Ser Arg Trp Arg 25 20 327 Glu Glu Thr Val Arg Asp Ala Asp His Leu Val Gly Gly Arg Leu Arg 330 Tyr Arg Asp Ala His Gln Ser Leu Asn Pro Ala Gly His Val Phe Pro 50 55 333 Phe His Pro Val Asp Glu Trp Val Ser Val Met Ala Ile Ile His Leu 70 336 Ala Ala Ser Phe Asn Arg Ile Tyr Tyr 90 337 85 339 <210> SEQ ID NO: 16 340 <211> LENGTH: 92 341 <212> TYPE: PRT 342 <213> ORGANISM: Mycobacterium marinum 344 <220> FEATURE: 345 <223> OTHER INFORMATION: 67.1

RAW SEQUENCE LISTING ERROR SUMMARY PATENT APPLICATION: US/10/088,356

DATE: 08/20/2002 TIME: 09:08:59

Input Set : A:\EP.txt

Output Set: N:\CRF4\08202002\J088356.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the $\langle 220 \rangle$ to $\langle 223 \rangle$ fields of each sequence which presents at least one n or Xaa.

Seq#:3; N Pos. 25,27,29,31,33,35,37,39,41,43,45,47,49,51,53,55,57,59,61,63 Seq#:4; N Pos. 20 Seq#:5; Xaa Pos. 6 Seq#:6; N Pos. 37,299 Seq#:7; Xaa Pos. 97 Seq#:25; N Pos. 184 Seq#:26; Xaa Pos. 57 Seq#:27; N Pos. 5,6,13,23,36,41,43,49,63,68,76,89 Seq#:28; Xaa Pos. 8,12,17,19,21,29,31 Seq#:29; N Pos. 27,30,32,33,34,48 Seq#:30; Xaa Pos. 9,10,11 Seq#:31; N Pos. 4,17,21,24,29,34,45,54,72 Seq#:32; Xaa Pos. 1,5,7,8,11,15,18,24 Seq#:33; Xaa Pos. 1,6,7,8,10,15,18,24 Seq#:34; Xaa Pos. 2,6,7,8,10,12 Seq#:35; N Pos. 3,21,30,41,46,51,54,58,71 Seq#:36; Xaa Pos. 10,14,16,18,20,24 Seq#:37; Xaa Pos. 1,7,10,13,16,17,18,23 Seq#:38; Xaa Pos. 1,7,10,13,15,17,18,19 Seq#:44; N Pos. 169 Seq#:44; Xaa Pos. 57

VARIABLE LOCATION SUMMARY
PATENT APPLICATION: US/10/088,356

DATE: 08/20/2002 TIME: 09:08:59

Input Set : A:\EP.txt

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Use of n's or Xaa's(NEW RULES):

Seq#:44; Xaa Pos. 57

Use of n's and/or Xaa's have been detected in the Sequence Listing. Use of $\langle 220 \rangle$ to $\langle 223 \rangle$ is MANDATORY if n's or Xaa's are present. in $\langle 220 \rangle$ to $\langle 223 \rangle$ section, please explain location of n or Xaa, and which residue n or Xaa represents.

Seq#:3; N Pos. 25,27,29,31,33,35,37,39,41,43,45,47,49,51,53,55,57,59,61,63 Seq#:4; N Pos. 20 Seq#:5; Xaa Pos. 6 Seq#:6; N Pos. 37,299 Seq#:7; Xaa Pos. 97 Seq#:25; N Pos. 184 Seg#:26; Xaa Pos. 57 Seq#:27; N Pos. 5,6,13,23,36,41,43,49,63,68,76,89 Seq#:28; Xaa Pos. 8,12,17,19,21,29,31 Seq#:29; N Pos. 27,30,32,33,34,48 Seq#:30; Xaa Pos. 9,10,11 Seq#:31; N Pos. 4,17,21,24,29,34,45,54,72 Seq#:32; Xaa Pos. 1,5,7,8,11,15,18,24 Seq#:33; Xaa Pos. 1,6,7,8,10,15,18,24 Seq#:34; Xaa Pos. 2,6,7,8,10,12 Seq#:35; N Pos. 3,21,30,41,46,51,54,58,71 Seq#:36; Xaa Pos. 10,14,16,18,20,24 Seq#:37; Xaa Pos. 1,7,10,13,16,17,18,23 Seq#:38; Xaa Pos. 1,7,10,13,15,17,18,19 Seq#:44; N Pos. 169

VERIFICATION SUMMARY

DATE: 08/20/2002 TIME: 09:08:59

Input Set : A:\EP.txt

Output Set: N:\CRF4\08202002\J088356.raw

PATENT APPLICATION: US/10/088,356

L:9 M:270 C: Current Application Number differs, Replaced Application Number L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:53 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:3 L:53 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:3 L:53 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0 L:54 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:3 L:54 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:3 L:54 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:60 L:69 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:4 L:69 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:4 L:69 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0 L:86 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:5 L:86 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:5 L:86 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0 L:111 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:6 L:111 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:6 L:111 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0 L:115 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:6 L:115 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:6 L:115 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:240 L:151 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:7 L:151 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:7 L:151 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:96 L:549 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:25 L:549 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:25 L:549 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:180 L:576 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:26 L:576 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:26 L:576 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:48 L:604 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:27 L:604 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:27 L:604 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0 L:605 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:27 L:605 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:27 L:605~M:341~W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:60 L:621 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:28 L:621 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:28 L:621 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0 L:624 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:28 L:624 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:28 L:624 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:16 L:640 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:29 L:640 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:29 L:640 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:0 L:656 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:30 L:656 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:30 L:656 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0 L:675 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:31



VERIFICATION SUMMARY PATENT APPLICATION: US/10/088,356

DATE: 08/20/2002 TIME: 09:08:59

Input Set : A:\EP.txt

Output Set: N:\CRF4\08202002\J088356.raw

L:675 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:31 L:675 M:341 W: (46) "n" or "Xaa" used, for SEQ ID\$#:31 after pos.:0L:676 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:31 L:676 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:31 L:676 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:60 L:691 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:32 L:691 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:32 L:691 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:0 L:694 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:32 L:694 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:32 L:694 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:16 L:709 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:33 L:709 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:33 L:709 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:0 L:712 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:33 L:712 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:33 L:712 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:16 L:727 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:34 L:727 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:34 L:727 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:0 L:745 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:35 L:745 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:35 L:745 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:0 L:746 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:35 L:746 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:35 L:746 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:60 L:761 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:36 L:761 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:36 L:761 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36 after pos.:0 L:764 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36 after pos.:16 L:779 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:0 L:782 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:16 L:797 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:0 L:800 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:16 L:937 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44 after pos.:144 L:938 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44 after pos.:192